

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

Janis Virbulis, et al.

Serial No.: 10/053,446

Filed: January 17, 2002

For: PROCESS AND APPARATUS FOR PRODUCING  
A SILICON SINGLE CRYSTAL

Attorney Docket No.: WSAG 0128 PUS

Group Art Unit: 1722

Examiner: Matthew J. Song

**REPLY BRIEF UNDER 37 C.F.R. § 41.41**

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Commissioner for Patents  
U.S. Patent & Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Reply Brief is in response to the Examiner's Answer mailed on July 2, 2007 for the above-identified patent application.

The present appeal is now limited to claims 1, 2, and 14 since the Examiner has now allowed claim 17. Applicants respectfully point out that much of the analysis regarding the deficiency of the references is developed with respect to claim 17. Applicants will not repeat that analysis here, but will only point out the two limitations absent from the Iida et al., Haida 1, and Haida 2. Firstly, Iida et al. fails to disclose the use of traveling magnetic fields and/or a heat shield. In addition, Iida et al. is also deficient in not including "a convection which is initially directed to a bottom of the crucible" as required by claim 1. Haida 2 is equally deficient by not disclosing these two limitations. Finally, it should be appreciated that

the Examiner does not allege that Haida 2 discloses the use of a heat shield as required by claims 1, 2, and 14.

Respectfully submitted,

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